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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,366	12/12/2001	Kintu O. Early	SP00-380	9108

22928 7590 10/21/2003

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EXAMINER	
HOFFMANN, JOHN M	
ART UNIT	PAPER NUMBER
1731	

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/021,366	EARLY ET AL.	
	Examiner	Art Unit	
	John Hoffmann	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 October 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) *1-15, 21, 24-25, 29-30, 35, 61-62* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *16-20,22,23,26-28,31-34 and 36-60* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *xx* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

Claims 1-15, 21, 24-25, 29-30, 35, 61-62 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention and/or specie, there being no allowable generic or linking claim. Election was made **without** traverse in Paper faxed 7 October 2003.

Information Disclosure Statement

The information disclosure statement filed 8 June 2002 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because Reference AS does not indicate complete date. Applicant claims benefit to a prior application - the date has a bearing on to whether reference AS is prior art or not. It has been placed in the application file, but reference AS has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 54 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear if the "soot body" refers back to the soot body of claim 16, or the additional soot body of claim 49.

It is noted that a future argument or evidence by Applicant which shows or alleges that one of ordinary skill could not achieve the optical fiber properties (such as claimed in claims 44-47 and the like), may be used to make a rejection under 35 USC 112 - for failing to claim a critical step, or failing to provide an enabling disclosure - if appropriate. Such a rejection will likely be made FINAL. In other words, if Applicant argues that Applicant does something special that one of ordinary skill would not know how to do - such may be used against Applicant for failing to claim and/or disclose that something special.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16, 19-20, 22-23, 55-60, 66-68 are rejected under 35 U.S.C. 102(b) as being anticipated by Aktins 5157747.

Claims 16 and 19: the temperature and atmosphere limitations are disclosed at col. 3, lines 31-44.

Claims 20 and 22 are discloses as per the same passage, among other places.

Claim 23: see col. 3, lines 61-62.

Claim 55 see col. 3, lines 40-43.

Claims 56-60 and 66-68: it would have been obvious to make the fiber as uniform as possible. So that the attenuation deviation is as small as possible, so that one could accurately and precisely know how well the signal will be maintained as it traverses the fiber.

Claims 32-33 as rejected under 35 U.S.C. 102(b) as being anticipated by Fleming 4775401

Claim 32: col. 7,lines 34-47 of Fleming discloses the invention.

Claim 33: see col. 8, line42 and elsewhere.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aktins 5157747.

Aktins doesn't disclose the amount of carbon monoxide to use - but does disclose using 5% hydrogen. It would have been obvious to perform routine experimentation to determine the optimal amount of carbon monoxide to use.

Claim 18: Examiner tried to determine what is encompassed by "about 3000 ppm". Given page 14, lines 1-2, (i.e. greater than 10,000 ppm); page 18, lines 7-8 (i.e. 480,000ppm) and the discussion of from paragraph 0081 to 0083, it is deemed that "about 3000 ppm" encompasses just about any concentration that works.

See column 7, lines 42- 45 and col. 8 line 32 of Aktins which teaches to use the "appropriate" amount and to dilute it. It would have been obvious to perform routine experimentation to determine what amount is "appropriate."

Claims 26-28, 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aktins as applied to claim16 above, and further in view of Hicks 4822136.

Aktins does not teach staring out with doping a preform with fluorine. Hicks discloses doping with fluorine to substantially eliminate hydroxyl ions and lower viscosity. It would have been obvious to alter Aktins by doping the soot body with fluorine, for the advantages of Aktins.

Claim 27, see col. 3 line 37.

Claim 28 see the first 44 lines of col. 3 of Aktins.

Claim 31, it would have been obvious to perform routine experimentation to determine the appropriate/optional gas concentrations.

Claim 36-37, 40-41, 63-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fleming as applied to claim 32 above, and further in view of Berkey 4629485.

Fleming does not disclose the fluorocarbon. It is well known that pure fluorine gas is nasty and that fluorocarbons are adequate substitutes when doping with fluorine (col. 5, lines 32-41 of Berkey are evidence of such). It would have been obvious to use a Berkey fluorocarbon for the Fleming fluorine source so that one doesn't have to bother taking necessary precautions.

Claim 37: Fleming's treatment is prior to sintering - see col. 8, line19. The halide exposure is terminated when consolidation begins: Col 9, line 26.

Claims 40-41 see how similar limitations are addressed above.

Claims 63-65: it would have been obvious to make the fiber as uniform as possible. So that the attenuation deviation is as small as possible, so that one could accurately and precisely know how well the signal will be maintained as it traverses the fiber.

Claims 32- 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkins 5157747 in view of Fleming 4775401.

Atkins discloses the invention except for fluorine. Col 8, lines 15-28 (and elsewhere) Fleming discloses that adding a halogen/fluorine to the substantially -oxygen free atmosphere one can reduce most contaminating elements, and use inexpensive starting materials as well as "dirty" work environments. It would have been obvious to alter the Atkins atmosphere so as to include fluorine - for any or all of the Fleming advantages.

Claim 34: see col 3, lines 1-62.

Claims 37-39 and 42-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fleming and Berkey as applied to claim 36 above, and further in view of Atkins 5157474.

Starting with Aktins: it would have been obvious to use fluorine compounds as discussed above, and terminate the fluorine during sintering, because it is not needed, it cost money and because it is a corrosive material. Atkins teaches to us carbon monoxide during heating - so as to convert the germanium oxide. See Atkins, col. 3, lines 39-44.

Claims 38-39: the claim does not limit what the ratio is a ratio of. Therefore it can be ratio of molecular weight, buoyancy, heat capacity or any other values. The ratio of inverse molecular weight would read on the values of claims 38 and 39.

Claims 42-43 are clearly met.

Claim 44-48: it would have been obvious to make the fiber as uniform as possible. So that the attenuation deviation is as small as possible, so that one could

accurately and precisely know how well the signal will be maintained as it traverses the fiber.

Claim 49 is met: it noted that the soot body of claim 49 is not related to the soot body of claim 16 - thus examiner need not show any connection between the two.

Claim 50-51 see how claims 38-39 are met.

Claims 52-53: see how claims 17-18 are met.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kyoto and Araujo are cited as being relevant to the disclosed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is 703-308-0469. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 703-308-1164. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

10-14-03

JOHN HOFFMANN
PRIMARY EXAMINER
GROUP 1300

John Hoffmann